

**Trade and Industrial Education**  
**Course: Diesel: Engine**  
**Course Code # 5718**  
**2 Credits**

**School Year** \_\_\_\_\_

**Term:** \_\_\_\_ **Fall** \_\_\_\_ **Spring**

Student:	Grade:
Teacher:	School:
Number of Competencies in Course: <b>41</b>	
Number of Competencies Mastered:	
Percent of Competencies Mastered:	

**STANDARD 1.0: Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
1.1	Demonstrate positive leadership skills in the classroom and community.			
1.2	Participate in SkillsUSA-VICA as an integral part of classroom instruction.			
1.3	Investigate how technology has made an impact on diesel engine performance in the past 2 years.			
1.4	Construct a job search network.			

**STANDARD 2.0: Students will demonstrate diesel technology safety practices, including Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) requirements for a diesel repair facility.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
2.1	Determine the safe and correct application and disposal for chemicals used in a diesel engine repair facility.			
2.2	Use protective clothing, eye and ear protection, and safety equipment.			
2.3	Use fire protection equipment.			
2.4	Follow OSHA and EPA regulations affecting engine performance service technology.			
2.5	Respond to manufacturer safety communications concerning diesel engine repair and performance systems and components.			
2.6	Pass with 100 % accuracy a written examination relating to safety issues.			
2.7	Pass with 100% accuracy a performance examination relating to safety.			
2.8	Maintain a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.			

**STANDARD 3.0: Students will properly perform general engine diagnosis.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
3.1	Analyze the function and operation of diesel engines.			
3.2	Diagnose diesel engines.			

**STANDARD 4.0: Students will properly diagnose and repair cylinder heads and valve trains.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
4.1	Analyze the function and operation of diesel engine cylinder heads and valve trains.			
4.2	Diagnose and repair diesel engine cylinder heads and valve trains			

**STANDARD 5.0: Students will properly diagnose and repair the diesel engine block.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
5.1	Analyze the function and operation of the engine block.			
5.2	Diagnose and repair the engine block.			

**STANDARD 6.0: Students will properly diagnose and repair lubrication systems.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
6.1	Analyze the function and operation of diesel engine lubrication systems.			
6.2	Diagnose and repair diesel engine lubrication systems.			

**STANDARD 7.0: Students will properly diagnose and repair cooling systems.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
7.1	Analyze the function and operation of a diesel engine cooling system.			
7.2	Diagnose, service, and repair a diesel engine cooling system.			

**STANDARD 8.0: Students will properly diagnose and repair air induction and exhaust systems.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
8.1	Analyze the function and operation of diesel air induction and exhaust systems.			
8.2	Diagnose, service, and repair diesel air induction and exhaust systems.			

**STANDARD 9.0: Students will properly diagnose and repair fuel systems.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
9.1	Analyze the function and operation of diesel engine fuel systems.			
9.2	Diagnose and repair diesel engine fuel supply systems.			
9.3	Analyze the function and operation of mechanical fuel injection systems.			
9.4	Diagnose and repair mechanical fuel injection systems.			
9.5	Analyze the function and operation of electronic fuel management systems.			
9.6	Diagnose and repair electronic fuel management systems.			

**STANDARD 10.0: Students will properly diagnose and repair engine brakes.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
10.1	Analyze the function and operation of diesel engine brakes.			
10.2	Diagnose and repair engine brakes.			

**STANDARD 11.0: Students will demonstrate communication skills required in the diesel service industry.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
11.1	Communicate and comprehend oral and written information typically occurring in diesel engine repair service.			
11.2	Solve diesel engine service problems and make decisions using a logical process.			
11.3	Use teamwork skills to accomplish goals, solve problems, and manage conflict within groups.			

**STANDARD 12.0: Students will demonstrate interpersonal and employability skills required in the diesel service industry.**

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
12.1	Evaluate career goals and establish long-term goals.			
12.2	Demonstrate attitudes conducive to workplace success			
12.3	Maintain a neat and orderly work area.			
12.4	Assess implications of diversity for communities, workplaces, and manufacturers.			
12.5	Develop personal financial skills			
12.6	Develop individual time management and work sequencing skills relating to diesel engine repair procedures.			

Additional Comments \_\_\_\_\_